WHAT IS CLAIMED IS:

1. A method of detecting cancer cells in a biological sample from a mammal, the method comprising steps of:

(i) providing the biological sample from the mammal; and

(ii) detecting a nucleic acid molecule encoding a PRC17 polypeptide comprising at least 85% amino acid sequence identity to an amino acid sequence of SEQ ID NO:2 or at least 70% amino acid identity to an amino acid sequence of SEQ ID NO:4 or SEQ ID NO:6 in the biological sample, wherein an increase in the level of the nucleic acid molecule in the sample compared to normal indicates the presence of cancer cells.

2. The method of claim 1, wherein the polypeptide has an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

3. The method of claim 1, wherein the detecting step further comprises:

(a) contacting the nucleic acid molecule with a probe under conditions in which the probe selectively hybridizes to the nucleic acid molecule to form a stable hybridization complex; and

(b) detecting the hybridization complex.

4. The method of claim 3, wherein the contacting step further comprises a step of amplifying the gene in an amplification reaction.

5. The method of claim 4, wherein the amplification reaction is a polymerase chain reaction.

6. The method of claim 1, wherein the nucleic acid is an mRNA.

7. The method of claim 1, wherein the biological sample is a tissue biopsy.

8. The method of claim 7, wherein the cancer cells are selected from the group consisting of prostate tissue, breast tissue, lung tissue, and ovarian tissue.

9. The method of claim 1, wherein the mammal is a human.

10. A method of detecting a presence of cancer cells in a biological sample from a mammal, the method comprising steps of:

(i) providing the biological sample from the mammal; and

(ii) detecting an overexpression of a polypeptide comprising polypeptide comprising at least 85% amino acid sequence identity to an amino acid sequence of SEQ ID NO:2 or at least 70% amino acid identity to an amino acid sequence of SEQ ID NO:4 or SEQ ID NO:6 in the biological sample, thereby detecting the presence of cancer cells in the biological sample.

11. The method of claim 10, wherein the polypeptide has an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

12. The method of claim 10, wherein the polypeptide is detected using an antibody that selectively binds to the polypeptide.

13. The method of claim 10, wherein the biological sample is a tissue biopsy.

14. The method of claim 10, wherein the cancer cells are selected from the group consisting of prostate cancer cells, breast cancer cells, lung cancer cells, and ovarian cancer cells.

15. The method of claim 10, wherein the mammal is a human.

16. A method of monitoring the efficacy of a therapeutic treatment of a cancer, the method comprising the steps of:

(i) providing a biological sample from a mammal undergoing the therapeutic treatment; and

(ii) detecting a level of a polypeptide comprising at least 85% amino acid sequence identity to an amino acid sequence of SEQ ID NO:2 or at least 70% amino acid identity to an amino acid sequence of SEQ ID NO:4 or SEQ ID NO:6 in the biological sample compared to a level in a biological sample from the mammal prior to, or earlier in, the therapeutic treatment, thereby monitoring the efficacy of the therapy.

17. The method of claim 16, wherein the polypeptide has an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

18. The method of claim 16, wherein the cancer is selected from the group consisting of prostate cancer, ovarian cancer, lung cancer, and breast cancer.

19. The method of claim 16, wherein the polypeptide is detected using an antibody that selectively binds to the polypeptide.

20. A method of monitoring the efficacy of a therapeutic treatment of a cancer, the method comprising the steps of:

(i) providing a biological sample from a mammal undergoing the therapeutic treatment; and

(ii) detecting a nucleic acid molecule encoding a PRC17 polypeptide comprising at least 85% amino acid sequence identity to an amino acid sequence of SEQ ID NO:2 or at least 70% amino acid identity to an amino acid sequence of SEQ ID NO:4 or SEQ ID NO:6 in the biological sample compared to a level in a biological sample from the mammal prior to, or earlier in, the therapeutic treatment, thereby monitoring the efficacy of the therapy.

21. An isolated nucleic acid encoding a PRC17 polypeptide, the nucleic acid encoding a polypeptide comprising at least 85% amino acid identity to an amino acid sequence of SEQ ID NO:2 or at least 70% identity to an amino acid sequence of SEQ ID NO:4 or SEQ ID NO:6.

22. The nucleic acid of claim 21, wherein the nucleic acid encodes a PRC17 polypeptide that specifically binds to polyclonal antibodies generated against an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

23. The nucleic acid of claim 21, wherein the nucleic acid encodes a PRC17 polypeptide comprising an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

24. The nucleic acid of claim 23, wherein the nucleic acid comprises a nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3 or SEQ ID NO:5.

25. The nucleic acid of claim 21, wherein the nucleic acid is amplified by primers that specifically hybridize under stringent hybridization conditions to a nucleic acid having a nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3 or SEQ ID NO:5.

26. The nucleic acid of claim 21, wherein the nucleic acid specifically hybridizes under stringent hybridization conditions to a nucleic acid having a nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3 or SEQ ID NO:5.

27. An isolated PRC17 polypeptide, the polypeptide comprising at least 85% amino acid sequence identity to an amino acid sequence of SEQ ID NO:2 or at least 70% amino acid identity to an amino acid sequence of SEQ ID NO:4 or SEQ ID NO:6.

28. The isolated polypeptide of claim 8, wherein the polypeptide specifically binds to polyclonal antibodies generated against SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

29. The isolated polypeptide of claim 8, wherein the polypeptide has an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

30. An antibody that selectively binds to the polypeptide of claim 8.

31. An expression vector comprising the nucleic acid of claim 1.

32. A host cell transfected with the vector of claim 31.

33. A method of identifying a compound that modulates activity of a PRC17 polypeptide, the method comprising steps of:

(i) contacting the polypeptide with the compound, wherein the polypeptide comprises at least 85% amino acid sequence identity to an amino acid sequence of SEQ ID NO:2 or at least 70% amino acid identity to an amino acid sequence of SEQ ID NO:4 or SEQ ID NO:6; and

(ii) determining the functional effect of the compound on the polypeptide.

34. The method of claim 33, wherein the polypeptide is linked to a solid phase.

35. The method of claim 33, wherein the polypeptide is expressed in a cell or cell membrane.

36. The method of claim 33, wherein the polypeptide has an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

37. A method of treating a disease or condition associated with the activity of a PRC17 polypeptide, the method comprising the step of administering to a subject a therapeutically effective amount of a compound identified using the method of claim 33.

38. The method of claim 37, wherein the subject is a human.

39. The method of claim 18, wherein the compound is an antibody.

40. A method of inhibiting proliferation of a cancer cell that expresses a polypeptide comprising at least 85% amino acid sequence identity to an amino acid sequence of SEQ ID NO:2 or at least 70% amino acid identity to an amino acid sequence of SEQ ID NO:4 or SEQ ID NO:6, the method comprising the step of contacting the cancer cell with a therapeutically effective amount of an inhibitor of the polypeptide.

41. The method of claim 40, wherein the polypeptide has an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

42. The method of claim 40, wherein the cancer cell is selected from the group consisting of a prostate cancer cell, a breast cancer cancer cell, a lung cancer cell or an ovarian cancer cell.

43. The method of claim 40, wherein the inhibitor is an antibody.